From: Jack Carroll
To: Microsoft ATR
Date: 12/5/01 7:45pm

Subject: Microsoft antitrust case: the open source community's interests

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I just heard about your request for public input. I hope this isn't too late. Here's a copy of what I sent to the Kansas AG. I sent similar messages to all the state AGs I could find e-mail addresses for, of those pursuing the case.

----- Forwarded message -----

Date: Thu, 29 Nov 2001 16:22:23 -0500 (EST)

From: Jack Carroll <jac@chives.mv.com>

To: GENERAL@ksag.org

Subject: Microsoft antitrust case: the open source community's interests

Dear Attorney General Stovall:

I understand that you, along with several other state AGs, plan to continue litigating the Microsoft antitrust case rather than agree to the $U.S.\ DOJ's$ proposed settlement.

Good for you!

Much of the existing record in this case has dealt with the effects of Microsoft's behavior on competing commercial software vendors. That needs no further discussion here.

I'd like to draw your attention to some important remedies that would benefit open source software users and developers, and by extension, computer users in general. My interest derives from being a long-time GNU/Linux user and advocate, and a stockholder in Red Hat, Inc. Because the open source software community isn't a business or even an organization, I can't claim to "represent" anyone other than myself in any legal sense. In a statistical sense, I believe I'm a fairly typical member of the loose-knit open source community.

There appears to be a widespread consensus that a monopoly in operating systems is harmful to the public interest in many ways; I doubt that I need to present arguments to convince you of that. I suggest to you that Microsoft's OS monopoly has already been broken, and that its dominance of business desktop applications is rapidly coming under serious challenge. Knowledgable businesses and consumers have several practical alternatives today. It's important to the public interest that this become more widely known, and that these choices remain readily available. Microsoft is doing everything possible to regain a de facto monopoly in desktop operating systems and essential applications. Several specific remedies should be imposed to prevent Microsoft from depriving users of a choice.

PROPOSED REMEDIES

- 1. Microsoft should be prohibited from using contract terms or any other tactics to collect license fees from computer vendors for any machine on which Microsoft software is not installed. The practice of collecting a fee for every machine a vendor ships is the infamous "Microsoft Tax". Its practical effect is to economically exclude large computer vendors who offer Microsoft preloads from also serving markets that don't use Microsoft products.
- 2. Microsoft shoud be prohibited from using licensing terms or technical measures to prevent or discourage computer vendors from installing other operating systems alongside Microsoft software, on the same computer. We call those "dual-boot" systems; only users who do their own OS installations have them now.
- 3. It's crucially important that Microsoft be required to document and publish the standards for the file formats its applications use. It's not enough to document and publish only the application programming interfaces (APIs); those benefit only programmers who develop applications which run on Microsoft operating systems. Nor is it sufficient to break up Microsoft into an applications company and an OS company; Microsoft applications ported to other operating systems still wouldn't exchange files with independently written applications. File format documentation

is necessary to create a level playing field, for as long as Microsoft applications continue to have a dominant market share.

4. For the same reason, Microsoft should be required to publish and strictly adhere to formal standards for its network protocols; applications and servers running on non-Microsoft operating systems need these to interact with machines running Microsoft systems.

DISCUSSION

Microsoft has gone to great lengths to convince the world that a monopoly in desktop operating systems is either natural, or irresistible, or a necessary standard. In fact, none of those propositions is true.

It's much more natural that the operating system, the common infrastruction which serves application software, be open to any interested party to improve and extend. During the last 10 years, open source software has advanced at a rate that no commercial vendor could possibly have the resources to match, even if they wanted to serve the best interests of the users -- which Microsoft clearly doesn't. Today, most new advances are tried out first on open source systems, because they're accessible for experiment; as a result, they're rapidly taking the technical lead over even the best of the commercial Unix variants.

The user base of open source operating systems and servers is expanding rapidly. They're already running large segments of the Internet's infrastructure, they're moving into embedded systems on a large scale, and they've begun to penetrate the business desktop, especially in the Third World.

To a software professional, a "standard" is a thick document that prescribes the behavior of some interface or protocol in precise and excruciating detail. The purpose of a standard is to achieve absolute certainty that any two independent designs that are in compliance with the same standard will work together without problems. By policy, Microsoft is the implacable enemy of all standards, because standards are a powerful weapon against monopolism. Microsoft conceals, obfuscates, and complicates the interfaces to its own programs. They violate pre-existing standards to cause incompatibilities, then try to convince users that their nonstandard implementation is the "standard". Open source systems, on the other hand, typically make every effort to comply with published standards, and the resulting source code is open for anyone to audit and correct.

Abolition of the Microsoft tax presupposes another widely discussed remedy; requiring Microsoft to treat all customers the same, according to published price lists and terms. Without that constraint, the company could manipulate pricing to place selected computer vendors at a disadvantage if they offer machines with non-Microsoft preloads, with dual-boot preloads, or without software.

I think this is a critical moment. Decisions made now may have powerful effects; very different futures are possible, depending on what happens next. Microsoft's dominant position is becoming rather precarious. Its long-term survival is in doubt. A number of pressures are combining to degrade its revenue potential while its costs remain high. Unlike many a company with a dark future, Microsoft's massive financial reserves give it the time and means to try many things simultaneously in an effort to regain a secure stream of large-scale revenue. In this effort, the company is becoming more aggressive and manipulative toward its users and competitors than ever before. Some of its legislative initiatives may have destructive effects on the society as a whole.

Microsoft's most basic problem is market saturation. In the developed world, nearly everybody who needs a computer has one. Most of them run Microsoft OS and application software, so there's no place for the market share to grow. The total market itself is shrinking; while the software on many of these machines is hardly satisfactory, it works just well enough so that the pain of continuing to use it doesn't justify the effort and expense of immediate upgrades -- and anyway, the customers have gotten wise to Microsoft's game, and understand quite well that the next upgrade isn't going to fix their problems without introducing new ones.

So the forced-upgrade cycle is no longer a reliable cash cow. I've seen assertions that if employee stock options are accounted for, the company is losing money.

The twin phenomena of open-source and free software are hitting Microsoft's revenues from another direction. Microsoft can't match either the quality or the cost-of-ownership of these products of user-directed cooperative development. Microsoft was able to buy or destroy most of its commercial competitors, but this new source of software can't be owned and doesn't need revenue. Several industrial-strength operating systems (FreeBSD, OpenBSD, Linux) are solid and hard at work, with thousands of volunteers extending their capabilities and fixing bugs as fast as they're discovered. Multiple application suites (Star Office, K Office, Abi Word) are rapidly approaching maturity, and are already being put into everyday service in markets that can't afford the cost of Microsoft user licenses. In this environment, Microsoft no longer has the luxury of holding back bug fixes and new capabilities to use as leverage for the continuing upgrade cycle. A rapidly maturing mix of open-source and free software is moving into the server and embedded-systems markets that Microsoft was never able to penetrate on any large scale, cutting off Microsoft's planned directions of expansion. Microsoft is now contained on the desktop and some business servers, and the prerequisites to erode its market share there are falling into place.

The antitrust suit has hurt Microsoft mainly by distracting its management's attention while these other changes were taking place. It's too late for litigation to help the business competitors that Microsoft stifled, other than by monetary damages to their creditors and stockholders. However, the settlement could make an important difference to the public interest, by blocking both overt and subtle maneuvers to re-impose its vanished monopoly.

The company's strategy appears to center on getting users to accept one more upgrade cycle, by finally offering software of reasonable quality, and poisoning it with traps that ensure revenue into the indefinite future. Measures such as time-limited licensing, back doors that allow remote disabling, shipping systems without installation media, bugging the software against transfer to a newer computer, and patented file formats that forbid reverse engineering are examples of techniques to dominate and exploit the end user. Once a user makes the mistake of putting his data into a Microsoft file format, he has to pay ransom to Microsoft forever to retain access to that data.

To fight off the defection of end users and computer manufacturers in the meantime, Microsoft can use restrictive licensing terms, secret agreements, propaganda, legislation to interfere with free participation in software and hardware design, and possibly support for unrelated litigation to drain the working capital of companies involved with open-source software. In the legislative arena it may find allies in the record and movie industries, themselves famous for shady and agressive dealings. Senator Fritz Hollings recently introduced legislation that would have the practical effect of making computer programming and engineering by private citizens illegal; this seems to have been stopped for the moment.

If Microsoft isn't allowed to block major computer manufacturers from offering open source preloads, there's a good chance the defection from proprietary software will become unstoppable in the next year or two. Personally, I look forward to a world without Microsoft. I think it's possible.

REFERENCES

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Sincerely, John A. Carroll